

IN THE CLAIMS

1. (Original) An electronic connector connected to a sensor or a switch, and communicating a signal through a common bus, comprising:
 - an I/O unit, receiving a signal from the sensor or the switch;
 - a control unit, generating a control signal for controlling the driving of a load corresponding to the sensor or the switch according to the signal received from the I/O unit; and
 - a communication unit, having a function of decoding the control signal, and transmitting the control signal to an equipment connected to the corresponding load through the common bus.
2. (Original) The electronic connector as set forth in claim 1, wherein the equipment is at least one of the electronic connector, an electronic control unit and an auxiliary equipment module having a function of generating the control signal.
3. (Original) The electronic connector as set forth in claim 1, wherein the common bus is a dedicated communication line.
4. (Original) The electronic connector as set forth in claim 1, wherein the common bus is a power supply line; and wherein the control signal is transmitted while being superposed on the power supply line.
5. (Original) An electronic connector connected to a load, and communicating a signal through a common bus, comprising:
 - a communication unit, receiving a control signal for controlling the driving of the load through the common bus;
 - a control unit, decoding the control signal, and generating a drive signal for driving the load; and
 - a load driving unit, driving the load according to the drive signal.

6. (Original) The electronic connector as set forth in claim 5, wherein the load is at least one electronic component out of a plurality of electronic components contained in an auxiliary equipment module.

7. (Original) The electronic connector as set forth in claim 6, further comprising an I/O unit which receives a signal from at least one sensor or at least one switch out of the plurality of electronic components, wherein the control unit generates the drive signal for driving the load according to the signal received from the I/O unit.

8. (Original) The electronic connector as set forth in claim 7, wherein the control unit generates a control signal for controlling the driving of a load corresponding to the sensor or the switch according to the signal received from the I/O unit;

wherein the communication unit has a function of decoding the control signal; and

wherein the communication unit transmits the control signal to an equipment connected to the corresponding load through the common bus.

9. (Original) The electronic connector as set forth in claim 5, wherein the equipment is at least one of the electronic connector, an electronic control unit and an auxiliary equipment module having a function of generating the control signal.

10. (Original) The electronic connector as set forth in claim 5, wherein the common bus is a dedicated communication line.

11. (Original) The electronic connector as set forth in claim 5, wherein the common bus is a power supply line; and

wherein the control signal is transmitted while being superposed on the power supply line.

Claims 12-17. (Canceled).

18. (New) The electronic connector as set forth in claim 5, further comprising:
- a housing that contains the communication unit and the control unit, the communication unit comprises a transmitting circuit and a receiving circuit and the control unit comprises an electronic board mounted integrated circuit and a semiconductor switching element with an input and an output;
 - a power supply line attachment site in electrical communication with the electronic board mounted integrated circuit and the semiconductor switching element input;
 - a ground line attachment site in electrical communication with the electronic board mounted integrated circuit and the semiconductor switching element; and
 - at least one drive signal attachment site in electrical communication with the semiconductor switching element output.